

# MOAB 4.0.0 Release Notes

- Many improvements to parallel correctness and efficiency
- Use of MPIIO for parallel read of HDF5-based file format
- Parallel import of file formats utilizing internal communication and/or partial read of files.
- Partial read of HDF5-based files
- Import files from: ABAQUS, IDEAS, MCNP5, NASTRAN, Sms, TetGen?, Star-CCM+
- String-based file options for controlling format-specific file options (see README.IO for a list of options.)
- Mesh refinement tool
- Compact storage of structured mesh data
- Variable-length tag data
- Alternate, cmake-based build system
- Support for most recent ITAPS APIs
- New data coupling tool
- Python API based on ITAPS APIs
- Many performance improvements (both runtime and memory), including entity sets, dense tag data, bit tag data, skinning, and entity deletion.
- MOAB namespace
- Fixed bug in get\_entities\_by\_type\_and\_tag for cases with non-zero input set which has or doesn't have entities